

In th Claims

Kindly delete claims 1 – 15 appearing on pages 26-30 of the application as filed.

Also, kindly delete claims 1- 22 appearing on the December 21, 2000 Preliminary Amendment.

Please insert new claims 23 to 44 shown below. For the Examiner's convenience, a listing of the entire set of claims now pending is enclosed herewith as Appendix A.

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23. A glass etching composition comprising 1 to 10 w/v % of fluoride, 20 to 80 v/v % of water, and 20 to 80 v/v % of water-miscible organic solvent.

24. The glass etching composition as claimed in claim 23, further comprising a gelling agent.

25. The glass etching composition as claimed in claim 23 or 24, further comprising sucrose as a stabilizer.

26. The glass etching composition as claimed in claim 23 or 24, further comprising a surfactant.

27. The glass etching composition as claimed in claim 23 or 24, further comprising at least one of acetic acid, citric acid and phosphoric acid, and a buffer for adjusting the pH of the glass etching composition.

28. The glass etching composition as claimed in claim 23 or 24, further comprising a dye for coloring the glass etching composition.

29. The glass etching composition as claimed in claim 23 or 24, wherein said fluoride is at least one compound selected from the group consisting of sodium fluoride, potassium fluoride, ammonium fluoride, sodium bifluoride, potassium bifluoride and ammonium bifluoride.

30. The glass etching composition as claimed in claim 23 or 24, wherein said water is at least one selected from the group consisting of tap water, ion exchange water, distilled water, ground water, spring water and filtrate water.

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~~31~~. The glass etching composition as claimed in claim 23 or 24, wherein said water-miscible solvent is at least one compound selected from the group consisting of glycerin, glycol, glycol ether, and alcohol.

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~~32~~. The glass etching composition as claimed in claim 24, wherein said gelling agent is at least one selected from the group consisting of hydroxypropyl cellulose, hydroxyethyl cellulose, methyl cellulose, carboxymethyl cellulose, sodium carboxymethyl cellulose, sodium arginate, arabic gum, tragacanth gum, xanthum gum, bentonite, veegum, gelatin, bengl gelatin, polyacrylate, polyacryl amide, polyvinyl alcohol, polyvinyl pyrrolidone, polyvinyl acetate, an acrylate polymer, an isobutyl maleic acid copolymer, an acrylic acid - methacrylic acid copolymer, an acrylic acid -maleic acid copolymer and variants thereof.

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~~33~~. The glass etching composition as claimed in claim 26, wherein said surfactant is at least one compound selected from the group consisting of an anionic surfactant, a non-ionic surfactant, an ampholytic surfactant, and a cationic surfactant.

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~~34~~. A frosting method for frosting a glass surface by using a glass etching composition, comprising the steps of:

- (a) cleaning the glass surface with a cleaning agent and wiping the glass surface dry,
- (b) protecting the glass surface by masking a portion of the glass surface where etching is not required,
- (c) coating the glass surface with the glass etching composition by immersing or spraying to etch the glass surface, and
- (d) cleaning the glass surface again, and removing the glass etching composition and the masking therefrom.

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35. The frosting method as claimed in claim ²⁷34 using the glass etching composition further comprising a gelling agent.

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36. The frosting method as claimed in claim ²⁷34 or ²⁸35, wherein said cleaning agent is selected from the group consisting of water, a soap, a household cleanser and a household detergent.

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37. The frosting method as claimed in any one of claims ²⁶33 to ²⁸35, wherein said masking is made by an oily pen, an oily paint, a resin paint, an acrylic paint, a masking tape, a seal, a silk screen printing method, or other printing methods.

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38. The glass etching composition as claimed in claim ²⁰31, wherein said glycol is at least one selected from the group consisting of methyl glycol, ethyl glycol, methylene glycol, ethylene glycol, propylene glycol, dimethylene glycol, diethylene glycol, dipropylene glycol, polymethylene glycol, and polyethylene glycol.

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39. The glass etching composition as claimed in claim 31, wherein said glycol ether is at least one selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monoethyl ether, diethylene glycol monomethyl ether, diethylene glycol monoethyl ether, diethylene glycol monoisopropyl ether, diethylene glycol monobutyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monoethyl ether, dipropylene glycol monoisopropyl ether, and dipropylene glycol monobutyl ether.

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40. The glass etching composition as claimed in claim 31, wherein said alcohol is at least one selected from the group consisting of methanol, ethanol, propyl alcohol, isopropyl alcohol, butyl alcohol, isobutyl alcohol, 1,2-ethane diol, 1,2-propane diol, 1,3-propane diol, 1,4-butane diol, 1,2,3-propane triol, 1,2,6-hexane triol and sorbitol.

24
41. The glass etching composition as claimed in claim 33, wherein said anionic surfactant is at least one selected from the group consisting of dodecylbenzene sodium sulfonate, alkylbenzene sodium sulfonate, lignine calcium sulfonate, perfluoroalkyl sulfonate, perfluoroalkyl carboxylate and perfuloroalkyl phosphate.

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42. The glass etching composition as claimed in claim 33, wherein said non-ionic surfactant is at least one selected from the group consisting of polyoxyethylene acetyl ether, polyoxyethylene lauryl ether, polyoxyethylene oleil ether, polyoxyethylene stearyl ether, a polyoxyethylene alkyl ether, polyoxyethylene octylphenyl ether, polyoxyethylene nonylphenyl ether, sorbitan laurate, sorbitan palmitate, sorbitan oleate, sorbitan stearate, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monooleate and polyoxyethylene sorbitan monostearte.

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43. The glass etching composition as claimed in claim 33, wherein said ampholytic surfactant is at least one selected from the group consisting of dimethylalky betaine, alkyl glycine, amide betaine, imidazoline, perfluoroalkylamino sulfonate and perfluoroalkyl betaine.

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44. The glass etching composition as claimed in claim 33 wherein said cationic surfactant is at least one selected from the group consisting of octadecyldimethylbenzylammonium chloride, alkyldimethyl benzylammonium chloride, tetradecyldimethylbenzylammonium chloride, dioleyldimethylammonium chloride, octadecyltrimethyl- ammonium chloride, alkyltrimethylammonium chloride, dodecyl- trimethylammonium chloride, hexadecyltrimethylammonium chloride, octadecylamine actate, hexadecylamine acetate, perfluoro- alkyltrimethylammonium salt and perfluoroalkyl quaternary ammonium salt.
